CLAIMS

1. A method for the preparation of oligorhamnosides, wherein it comprises the following successive steps:

a) self-condensation of rhamnose in a single reaction step in acetonitrile in the presence of an acid catalyst and precipitation of the oligorhamnosides thus formed; then

b) recovery by filtration of the precipitate obtained following step a) comprising the oligorhamnosides.

2. A method according to claim 1, wherein the temperature of the reaction mixture, during step a), lies between 20 °C and 120 °C, advantageously between 35 °C and 75 °C.

3. A method according to either of the preceding claims, wherein the acid catalyst is chosen from the group comprised of hydrochloric acid, sulfuric acid, phosphoric acid, ortho-, meta- and para-toluenesulfonic acid, benzene-sulphonic acid, substituted benzene-sulphonic acids, methane-sulphonic acid, Lewis acids, in particular zinc chloride and ferric chloride, clay acids, in particular montmorillonite K-10, synthetic resin acids, zeolites and combinations thereof.

4. A method according to any of the preceding claims, wherein the water formed during the self-condensation reaction of step a) is eliminated physically or chemically.

5. A method according to claim 4, wherein the water elimination technique comprises the use of a desiccation agent chosen among the group consisting of the carbonates, the sulfates, calcium chloride, phosphorus pentoxide, the molecular sieves or combinations of these various desiccation agents.

6. A method according to any of the preceding claims, wherein step a) is carried out at atmospheric pressure and under atmosphere of an inert gas, such as argon or nitrogen.

7. A method according to any of the claims 1 to 6, wherein step a) is carried out at reduced pressure, in an autoclave.

8. A method according to any of the preceding claims, wherein prior to step b), the reaction mixture is cooled to a temperature in the range between the condensation reaction temperature and 0 °C.

9. A method according to claim 8, wherein the reaction mixture is cooled to ambient temperature, advantageously to 20 °C.

10. A method according to any of the preceding claims, wherein the precipitate recovered following step b) is washed with acetonitrile.

11. A method according to any of the preceding claims, wherein the acetonitrile included in the filtrate obtained following step b) is evaporated in order to recover a second precipitate containing oligorhamnosides.

12. A composition comprising a mixture of oligorhamnosides obtainable by a method according to any of the claims 1 to 10, wherein the aforementioned oligorhamnosides contain from 2 to 12 rhamnose motifs, advantageously from 2 to 9 rhamnose motifs.

13. A composition according to claim 12, wherein the distribution of oligorhamnosides as a function of their degree of polymerization roughly follows a Poisson distribution.

14. A composition according to claims 12 or 13, wherein the rhamnose motifs have up to three of their hydroxyl functions implicated in the formation of glycosidic bonds.

15. A medicament containing a composition as defined in any of the claims 12 to 14.

16. A medicament according to claim 15, intended to regulate inflammatory mechanisms.

17. A medicament according to claim 15 or 16, intended for the prevention or treatment of allergic, inflammatory or immune reactions or pathologies of the skin and/or mucous membranes.

18. A medicament according to any of the claims 15 to 17, intended to inhibit the immune response related to inflammatory stress.

19. A medicament according to any of the claims 15 to 18, intended to inhibit leukocyte activation, secretion of keratinocytic cytokines, keratinocytic hyperplasia phenomenon, antigen processing by the dendritic cells of the skin, maturation of antigen-presenting cells, and recognition phenomenon between lymphocytes and antigen-presenting cells.

20. A medicament according to any of the claims 15 to 19, intended for the prevention or treatment of diseases chosen from the group comprised of atopic and/or contact eczema, inflammatory dermatoses, irritant dermatitis, acne, autoimmune diseases such as psoriasis, photo-immunosuppression, vitiligo, pityriasis, sclerodermas, rheumatoid arthritis, Crohn's disease and graft rejection.

21. A medicament according to any of the claims 15 to 20, intended for the prevention and treatment of age-related chronic inflammatory problems and their consequences.

22. A medicament according to claim 21, intended for the prevention or treatment of diseases chosen from the group comprised of anaphylactic sensitivities, pigmentary anomalies of the skin, dermal hypervascularity and inflammatory fissuring.

23. A medicament according to any of the claims 15 to 22, intended to reduce the allergenic and/or irritant character of a composition or perfume.

24. A medicament according to any of the claims 15 to 23, wherein it contains from 0.001% to 50% by weight of oligorhamnosides.

25. A method for the cosmetic treatment of skin and/or mucous membranes that are sensitive, irritated, intolerant, of an allergic tendency, aged, exhibiting danger signs, exhibiting a disorder of the cutaneous barrier, exhibiting cutaneous redness or exhibiting a non-pathological immunological imbalance related to intrinsic, extrinsic or hormonal aging, wherein it consists of applying to the skin and/or the mucous membranes a composition according to any of the claims 12 to 14.

26. A method of cosmetic treatment to slow the natural aging of the skin and/or to prevent the accelerated aging of skin subjected to external attacks, in particular to prevent photo-induced aging of the skin, wherein it consists of applying to the skin a composition according to any of the claims 12 to 14.